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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,559	12/14/2001	Tommy Petrogiannis	9680.188USU1	3770
23552 7590 10/20/2008 MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER POWERS, WILLIAM S	
			ART UNIT 2434	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/022,559	Applicant(s) PETROGIANNIS ET AL.	
	Examiner WILLIAM S. POWERS	Art Unit 2434	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14, 17-36, 38, 41-59 and 63-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14, 17-36, 38, 41-59 and 63-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 7/31/2008 have been fully considered but they are not persuasive.
2. As to Applicant's argument that, "Nowhere in Davis is there any mention of the media signal representing a document which has been electronically signed through a signing ceremony of any kind. Nowhere in Davis is there any mention of generating a process log representing such a signing ceremony, nor can the metadata be said to be a process authentication code uniquely representing such a process log" (Remarks, p. 11, lines 15-19), the Examiner respectfully disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The Davis reference is used to show that hashed metadata of a document is embedded into that document (see at least Davis, col. 1, lines 55-64). The generation of a process log recording the signing ceremony is taught by Smithies (see previous Office Action pp. 5-6). The data embedded by Davis is a hash of metadata that is stored externally from the data object (Davis, col. 1, lines 55-64) and that metadata can include time and location stamps (Davis, col. 1, lines 65-67) and other session information that is used to protect data

Art Unit: 2434

objects from unauthorized manipulation (Davis, col. 7, lines 51-67). Clearly, the intent of the metadata of Davis is to protect data objects and the metadata is linked to a particular data object through the embedding of a hash of the metadata in the data object. The transcript object of Smithies is metadata of the document that is being signed and is used to protect the document from manipulation. For at least the reasons above, the rejection of the claims is maintained.

3. As to Applicant's argument that, "Storing a hash of the transcript object in the document would therefore, be redundant and teaches away from the recited invention. One skilled in the art would therefore, not be motivated to embed a hash of the transcript object in the document of Smithies" (Remarks, p. 12, lines 22-24), the Examiner respectfully disagrees. The Examiner can find nothing in the Smithies patent that indicates embedding a secure document authentication code that is a hash of the process log in the document teaches away from the Smithies patent. The Applicant has provided synopsis of the method of Smithies, but there is nothing that supports the Applicant's contention. It is old and well known in the art that redundancies enhance security. In the Abstract of Smithies the transcript object is secured through encryption and a checksum. When digital watermarks are applied to digital images, documents, movies, music they are not placed in only one location. They are placed in many locations to make it more difficult to overcome. For at least the reasons above, the rejection of the claims is maintained.

4. As to Applicant's arguments using embodiments from the art of record not cited in the rejection of the claims, the Examiner respectfully disagrees. The Examiner has

Art Unit: 2434

cited specific sections and included interpretations of the art of reference in the rejections of the claims. As such, the Applicant has not shown how the citations and interpretations used to reject the claims fail to teach the claims limitation. For at least the reasons above, the rejection of the claims is maintained.

Response to Amendment

5. The Examiner has stated the below column and line numbers as examples. All columns and line numbers in the reference and the figures are relevant material and Applicant should be taken the entire reference into consideration upon the reply to this Office Action.

6. Claims 13, 15, 16, 37, 39, 40 and 60-62 are cancelled.

7. Claim 49 has been amended.

8. Claims 1-12, 14, 17-36, 38, 41-59 and 63-68 are pending.

Claim Objections

9. In light of Applicant's amendment, the previous objection to claim 49 has been withdrawn.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 1, 2, 4, 5, 6, 8-12, 14, 17, 22-27, 29, 30, 32-36, 38, 41, 46-50, 52-55, 57-59, 63, 67 and 68 rejected under 35 U.S.C. 103(a) as being unpatentable over US

Art Unit: 2434

Patent No. 6,091,835 to Smithies et al. (hereinafter Smithies) in view of US Patent No. 7,209,571 to Davis et al. (hereinafter Davis) in further view of US Patent No. 6,085,322 to Romney et al.

As to claims 1 and 25, Smithies teaches:

- a. Having the user access the web environment from a secure electronic system, said secure system having verified the identity of the user (Smithies, column 12, lines 28-54).
- b. Having the user sign the electronic document in said web environment, said signing being server-based (Smithies, column 12, lines 14-16 and column 41, line 39-column 42, line 52) and comprising the substeps of:
 - i. Presenting the user with a web-based representation of the document (Smithies, column 42, lines 8-24).
 - ii. Presenting the user with legal information related to said signing and getting agreement from the user of said legal information (Smithies, column 34, lines 8-17).
 - iii. Upon agreement from the user of the legal information, applying said signature of the user on said document (Smithies, column 34, line 61-column 35, line 49).

Art Unit: 2434

c. Generating a process log (transcript object) of the signing of step b), said process log providing for reconstruction of substeps b) i) to b) iii) as executed by said user (transcript object recreates the document and all actions during the signing procedure to the user for final approval of the signature and document) (Smithies, column 42, lines 32-52), and securely associating said process log with the document as signed (transcript object is associated with the affirmed document) (Smithies, column 8, lines 31-34 and column 14, lines 58-62).

i. Generating a secure process authentication code (checksum, hash) uniquely representing said process log (transcript object) (Smithies, column 14, lines 22-39).

Smithies teaches a link between the document and the transcript object (Smithies, column 14, lines 34-39 and 58-62), but does not expressly mention placing a hash in the signed document. However, in an analogous art Davis teaches:

ii. Embedding said process authentication code (hash of metadata that is used to access metadata stored in a database) in said document as signed, thereby securely associating said process log and document (Davis, column 1, lines 55-64).

Therefore, one of ordinary skill in the art at the time the invention was made would have been motivated to implement the digital affirmation process of

Art Unit: 2434

Smithies with the embedding of a metadata hash in a digital object in order to authenticate data associated with digital objects as suggested by Davis (Davis, column 1, lines 16-18).

Smithies as modified does not expressly mention making the signed document available to the user. Although, it is implicit that the signed document would be available to the user for purposes of review, archiving and/or proof of purchase, in the case of a commercial transaction, as exemplified in the analogous art of Romney that teaches:

- d. Making the document as signed available to the user (client has copy of signed authenticated document) (Romney, column 11, lines 36-49).

Therefore, one of ordinary skill in the art at the time the invention was made would have been motivated to implement the digital affirmation process of Smithies as modified with making the signed document available to the user in order for the user to have a copy of the signed document for his/her personal records.

As to claims 2 and 30, Smithies as modified teaches retrieving said document from a document storing location (Smithies, column 20, lines 55-63 and column 42, lines 8-30).

As to claims 4 and 32, Smithies as modified teaches transforming said document from a non-web format to a web-format (Smithies, column 20, line 55-column 21, line 7).

As to claims 5 and 26, Smithies as modified teaches said legal information comprises information about legal implications of the signing of the document (Smithies, column 34, lines 8-18).

As to claim 6 and 27, Smithies as modified teaches said legal information comprises legal disclosures related to said document (Smithies, column 13, lines 14-23 and column 22, lines 2-7).

As to claims 8 and 29, Smithies as modified teaches presenting said legal information in a series of dialog boxes (Smithies, column 34, lines 5-33 and figures 4a-g).

As to claims 9 and 33, Smithies as modified teaches associating user-specific information to said document (Smithies, column 12, lines 51-55 and column 33, lines 6-34).

As to claims 10 and 34, Smithies as modified teaches said user-specific information is included in a special signature file defining the signature of the user (Smithies, column 13, lines 42-46).

As to claims 11 and 35, Smithies as modified teaches comprises associating a digital certificate (transcript object) (Smithies, column 12, lines 32-38 and column 37, lines 25-33) and a private key to the document (Smithies, column 8, lines 38-44).

As to claims 12 and 36, Smithies as modified teaches obtaining said user-specific information from the secure electronic system (Smithies, column 33, lines 6-34 and column 12, lines 51-54).

As to claims 14 and 38, Smithies as modified teaches storing said process log (transcript object) in a log database (Smithies, column 14, line 48-column 15, line 11).

As to claims 17, 41 and 63, Smithies as modified teaches providing an audit trail of the signing of step b) in the document as signed (Smithies, column 28, line 46-column 29, line 67).

As to claims 22 and 46, Smithies as modified teaches transmitting a copy of the document as signed to the user (Romney, column 11, lines 34-49).

As to claims 23 and 47, Smithies teaches enabling the user to download the document as signed (Romney, column 11, lines 34-49).

As to claims 24 and 48, Smithies teaches making the document as signed available to at least one additional party concerned by said electronic document (Romney, column 11, lines 34-49).

As to claim 49, Smithies as modified teaches:

- a. Accessing means for accessing said web environment from a secure electronic system (Smithies, column 12, lines 28-54).
- b. A document-rendering module for presenting the user with a web-based representation of said document (Smithies, column 42, lines 8-24).
- c. A legal disclosure module for presenting the user, in said web environment, with legal information related to electronically signing said document and obtaining agreement from the user of said legal information (Smithies, column 34, lines 8-17).
- d. A document approval module for providing the signature of the user to the document upon agreement from the user of the legal information, thereby signing said document (Smithies, column 29, lines 46-53).
- e. A process log module for generating a process log of the signing of the document and securely associating said process log with the document as signed, said process log comprising reconstruction data for allowing the reconstruction of the presenting the user with said web-based representation

Art Unit: 2434

of the document (transcript object recreates the document and all actions during the signing procedure to the user for final approval of the signature and document) (Smithies, column 42, lines 32-52).

f. Presenting the user with said web-based representation of the document (Smithies, column 42, lines 8-24).

g. Presenting the user with said legal information (Smithies, column 34, lines 8-17).

h. Generating a secure process authentication code (checksum, hash) uniquely representing said process log (transcript object) (Smithies, column 14, lines 22-39).

i. Embedding said process authentication code (hash of metadata that is used to access metadata stored in a database) in said document as signed, thereby securely associating said process log and said document (Davis, column 1, lines 55-64).

j. Obtaining agreement from the user of said legal information and of said signing of the document (Smithies, column 29, lines 46-53).

k. A document distribution module for making the document as signed available to the user, wherein said accessing means and said document-rendering, legal disclosure, document approval, process log and document distribution modules are server-based (Romney, column 11, lines 34-49).

As to claim 50, Smithies as modified teaches said document-rendering module comprises retrieving means for retrieving said document from a document storing location (Smithies, column 20, lines 55-63 and column 42, lines 8-30).

As to claim 52, Smithies as modified teaches transforming means for transforming said document from a non-web format to a web-format (Smithies, column 20, line 55-column 21, line 7).

As to claim 53, Smithies as modified teaches said legal information comprises information about legal implications of the signing of the document (Smithies, column 34, lines 8-18).

As to claim 54, Smithies as modified teaches said legal information comprises legal disclosures related to said document (Smithies, column 13, lines 14-23 and column 22, lines 2-7).

As to claim 55, Smithies as modified teaches said legal disclosure module comprises displaying means for displaying (Smithies, column 19, lines 39-43)

Art Unit: 2434

said legal information (Smithies, column 24, lines 63-67) in a web-based medium (Smithies, column 12, lines 14-16).

As to claim 57, Smithies as modified teaches said web-based medium includes a plurality of dialogue boxes (Smithies, column 34, lines 5-33 and figures 4a-g).

As to claim 58, Smithies as modified teaches:

- a. A user binding module cooperating with the secure electronic system to obtain therefrom user-specific information (Smithies, column 12, lines 51-55 and column 33, lines 6-34).
- b. Generating a special signature file using said user-specific information (Smithies, column 13, lines 42-46).
- c. Providing said special signature file to the document approval module, said special signature file defining the signature of the user (Smithies, column 13, lines 42-46).

As to claim 59, Smithies as modified teaches said user-specific information comprises a digital certificate (transcript object) (Smithies, column 12, lines 32-38 and column 37, lines 25-33) and private key (Smithies, column 8, lines 38-44).

As to claim 67, Smithies teaches transmitting a copy of the document as signed to the user (Romney, column 11, lines 34-49).

As to claim 68, Smithies teaches provides a copy of the document as signed to at least one additional party concerned by said electronic document (Romney, column 11, lines 34-49).

14. Claim 3 and claim 31 and claim 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,091,835 to Smithies et al. (hereinafter Smithies) in view of US Patent No. 7,209,571 to Davis et al. (hereinafter Davis) in further view of US Patent No. 6,085,322 to Romney et al. (hereinafter Romney) as applied to claim 1 and claim 25 and claim 49 respectively above, and further in view of US Patent No. 5,649,186 to Ferguson.

As to claims 3 and 31, Smithies as modified does not expressly mention the use of templates in the generation of documents. However, in an analogous art, Ferguson teaches generating said document from a template (Ferguson, column 2, lines 52-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the electronic signing scheme of Smithies with the use of templates to generate documents of Ferguson in order to display them in a standardized way (HTML) as suggested by Ferguson (Ferguson, column 2, lines 52-60).

As to claim 51, Smithies as modified teaches a document customization module cooperating with the document-rendering module for generating said document from a template (Ferguson, column 2, lines 52-60).

15. Claim 7, claim 28 and claim 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,091,835 to Smithies et al. (hereinafter Smithies) in view of US Patent No. 7,209,571 to Davis et al. (hereinafter Davis) in further view of US Patent No. 6,085,322 to Romney et al. (hereinafter Romney) as applied to claim 1 and claim 25 and claim 55 above, and further in view of US Patent No. 6,151,624 to Teare et al. (hereinafter Teare).

As to claims 7 and 28, Smithies as modified teaches displaying the legal information concerning the signing of a document (Smithies, column 34, lines 8-18), but does not expressly state that the legal information is displayed as a web page. However, in an analogous art, Teare teaches presenting said legal information in a series of web pages (Teare, column 16, lines 16-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the electronic signing scheme of Smithies with the presentation of the legal information associated with the signing as a web page of Teare

Art Unit: 2434

so that the user can accept or decline the legal agreement over the internet as suggested by Teare (Teare, column 16, lines 16-27).

As to claim 56, Smithies as modified teaches said web-based medium includes a plurality of web pages (Teare, column 16, lines 16-27).

16. Claims 18-21 and claims 42-45 and claims 64-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,091,835 to Smithies et al. (hereinafter Smithies) in view of US Patent No. 7,209,571 to Davis et al. (hereinafter Davis) in further view of US Patent No. 6,085,322 to Romney et al. (hereinafter Romney) as applied to claim 17 and claim 41 and claim 49 respectively above, and further in view of US Patent No. 5,606,609 to Houser et al. (hereinafter Houser).

As to claims 18, 42 and 64, Smithies as modified does not expressly mention hashing a signed document to use as an authentication measure. However, in an analogous art, Houser teaches including a secure document authentication code uniquely representing said document as signed in said audit trail (Houser, column 4, lines 20-34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the digital signature scheme of Smithies as

Art Unit: 2434

modified with the hashing of a signed document of Houser in order to ensure the validity of a signed document as suggested by Houser (Houser, column 4, lines 27-34).

As to claims 19 and 43, Smithies as modified teaches storing said secure document authentication code in a database (Smithies, column 14, line 48-column 15, line 11).

As to claims 20, 44 and 65, Smithies as modified teaches generating a hash of said document as signed defining the secure document authentication code Houser, column 4, lines 20-34).

As to claims 21, 45 and 66, Smithies as modified teaches embedding a secure document authentication code (hash of signed document) uniquely representing the document as signed inside said document (Houser, column 4, lines 20-34).

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2434

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM S. POWERS whose telephone number is (571)272-8573. The examiner can normally be reached on m-f 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571 272 3811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. S. P./
Examiner, Art Unit 2434

William S. Powers
Examiner
Art Unit 2434

10/9/2008

/ELLEN TRAN/
Primary Examiner, Art Unit 2434